

1. Applicant's election without traverse of the group I invention directed to an aerial gun pod mounting assembly in the reply filed on 8/18/2008 is acknowledged.

Claims 1-25 and 42 read on the elected invention group and an action on these claims follows.

2. The substitute specification, filed on 8/18/2008, has been denied entry because it does not include a statement that the substitute specification does not include any new matter.

3. Claims 1-25 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4-5, applicant claims "a gun pod for controlling the aerial gun". It is not understood as to how a gun pod can control a gun. Please clarify. In claim 1, last lines, it is not understood as to what is meant by the phrase "the aerial gun in a direction". Please clarify. In claim 12, the phrase "the allowable ranges of controllable direction" lacks an antecedent. In claim 16, what the terms "an attack, trainer" and "A/A" are intended to represent is indefinite. In claims 23 and 24, what the terms "M61A1 20-mm gun" and "DEFA 30-mm gun" intended to represent is not understood. In claims 13 and 15, it is not understood as to how the direction is determined and modified during flight. Please clarify.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 9-16, 18-19, 25, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Clayson et al. (881).

Clayson et al. (881) disclose a controlling apparatus comprising:

- a) an aerial gun; 70
- b) a gun pod; 20
- c) delivering gun projectiles to target; see fig. 1B
- d) altering the pointing direction of gun independent of direction of the aerial-combat vehicle; see fig. 2
- e) a gun movement control device; col. 9, lines 53-54
- f) actuator devices; 128, 170
- g) a gun pod aperture; opening between 62's ;  
see fig. 4
- h) a gun pod aperture covering; 62
- i) gun pod mounted on wing containing a hard point; 32
- j) a range of controllable gun movement from 5 to 70 degrees; and see figs. 2, 3, and 4
- k) controllable elevation of gun position. see figs. 2, 3, and 4

With regard to claim limitations directed to “controllable direction is determined and modified dynamically in-flight” and “dynamically determined and modified in-flight”, note that claim limitations directed to the way in which the device operates or method of use limitations are limiting in the confines of an apparatus or device claim.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayson et al. (881) in view of Martin (121).

Clayson et al. (881) apply as previously recited. However, undisclosed is a gun pod unit that is mounted on a central fuselage hard point. Maring (121) teaches a gun pod unit that is mounted on a central fuselage hard point (see figs. 1 and 2). Applicant is substituting one mounting location for a gun pod for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Martin to the Clayson et al. controlling apparatus and have a controlling apparatus mounted at a different location on the aircraft.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayson et al. (881) in view of Halevy et al. (331).

Clayson et al. (881) applies as previously recited. However, undisclosed is an aerial combat vehicle that is an unmanned combat vehicle. Halevy et al. (331) teach an aerial combat vehicle that is an unmanned combat vehicle (see entire disclosure). Applicant is substituting one type of aerial combat vehicle for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Halevy et al. to the

Clayson et al. controlling apparatus and have a controlling apparatus that includes a different type of aerial vehicle.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayson et al. (881) in view of Kuesters et al. (650).

Clayson et al. (881) apply as previously recited. However, undisclosed are projectiles that are guided munitions. Kuesters et al. (650) teach projectiles that are guided munitions (see claim 1). Applicant is substituting one type of contained projectile for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Kuesters et al. (650) to the Clayson et al. controlling apparatus and have a controlling apparatus that includes a different type of contained projectile.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayson et al. (881) in view of Lucas (366).

Clayson et al. (881) apply as previously recited. However, undisclosed are projectiles that include electronic countermeasures. Lucas (366) teaches projectiles that include electronic countermeasures (col. 1, lines 17-33). Applicant is substituting one type of contained projectile for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Lucas to the Clayson et al. controlling apparatus and have a controlling apparatus that includes a different type of contained projectile that includes electronic countermeasures.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayson et al. (881) in view of Kirkpatrick et al. (504).

Clayson et al. (881) apply as previously recited. However, undisclosed is a gun that is a M61A1 20mm gun. Kirkpatrick et al. (504) teach a gun that is a M61A1 20mm gun (col. 1, lines 9-38). Applicant is substituting one type of gun for another in an analogous art setting with expected or predictable results. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Kirkpatrick et al. to the Clayson et al. controlling apparatus and have a controlling apparatus with a different type of gun.

12. Claims 22 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877 and whose e-mail address is ([Stephen.Johnson@uspto.gov](mailto:Stephen.Johnson@uspto.gov)). The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The Central FAX phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

Application/Control Number: 10/534,169  
Art Unit: 3641

Page 7

/Stephen M. Johnson/  
Primary Examiner, Art Unit 3641

SMJ  
October 17, 2008